



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

08/933,822 09/19/97 BOWERS

C 30-2138CIP1

EXAMINER

IM62/0715

VIRGINIA ANDREWS
ALLIEDSIGNAL INC
P O BOX 31
PETERSBURG VA 23804

ART UNITS

PAPER NUMBER

DATE MAILED: 1733

07/15/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/933,822

Applicant(s)
Bowers

Examiner
Sam Chuan Yao

Group Art Unit
1733



☒ Responsive to communication(s) filed on Sep 19, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 1-15, 19, and 20 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 16-18 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 1

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1733

DETAILED ACTION

Election/Restriction

1. Claims 1-15 and 19-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected product claims. Election was made **without** traverse in Paper No. 6 dated 06-17-99.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Queen et al (US 5,567,256).

Queen et al substantially discloses the process recited in claim 16 (col. 2 line 36 to col. 3 line 4; figure 1). Although not explicitly disclosed, it is taken that Queen et al the blend of primary fibers and binder fibers are intrinsically ring or wrap spun to form yarns as evidence from figure 1 and the following passage, for example: A blend ... are spun ... into blended yarns (col. 2 lines 36-

Art Unit: 1733

40). In any event, such would have been obvious in the art as such is a conventional method to form yarn from fibrous material.

Queen et al is silent on the melting point of the binder fibers. In particular, Queen et al does not disclose the binder fibers having a melting range of about 105 °C to 190 °C. However, it would have been obvious in the art to provide binder fibers having a melting range of about 135 °C or less in making rugs in the process taught by Queen et al because Queen et al discloses heat-setting the blended yarns at a temperature of 135 °C or less and because such is taken to be a result effective variable routinely optimize by experimentation for the desired end-use of the blended yarns.

With respect to claim 17, since it is old in the art to heat-set during the twist-setting of yarns comprising a blend of primary fibers and binder fibers; since a preference on whether to heat-set the blended yarn during or after the twist setting of the blended yarns is well within the purview of choice in the art; and since only the expected result of obtaining the same desired result as the heat-setting process taught by Queen et al would have been achieved in heat-setting the blended yarns during twist-setting of the yarns, this claim would have been an obvious expediency in the art making rugs in the process of Queen et al.

4. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 88/03969.

Art Unit: 1733

WO '969, drawn to making synthetic yarn with heat-activated binder fiber, substantially discloses the process of claims 16 (page 3 paragraph 3; page 4 paragraph 2; and page 5 paragraph 1; example 1).

WO '969 does not disclose ring spinning or wrap spinning the blend of primary fibers and binder fibers. However, it would have been obvious in the art to ring spin or wrap spin the blend of primary fibers and binder fibers making the yarn of WO '969 because WO '969 discloses twist setting the blend to form yarns using the Suessen twist method (page 5 paragraph 1; example 1); and because ring spinning or wrap spinning fiber material to form yarn is a conventional technique in the yarn making yarn.

With respect to claim 17, see claims 9-10 of WO '969.

With respect to claim 18, since it is conventional in the art to form fibrous material by spinning staple fibers, and since one in the art is reasonably expected to apply from among the well known effective techniques of forming fibers, the limitations in this claim would have been obvious in the art making the yarn of WO '969.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 1733


Gradinder et al (US 4,644,741; claim 1, for example) and Lofquist (US 5,478,624; see example 4, for instance) are cited as reference of interest substantially disclosing the process recited in the claims.

Hill, Jr. (US 3,987,615) and Grahma, Jr. et al (US 4,541,231) are cited as reference of interest showing a process of making yarn by ring spinning fibers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Chuan Yao** whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Thursday from 8:00 AM-5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mike Ball, can be reached on (703) 308-2058. The **fax number** in Group Art Unit 1733 for any official papers (i.e. papers that will be entered as part of the file wrapper) is (703) 305-7718 and for unofficial papers (e.g. proposed amendments) is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.


Sam Chuan Yao
Primary Examiner
Art Unit 1733

scy
July 13, 1999